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SYMPOSIUM PAPERS OF THE ANNUAL CONVENTION OF THE AMERICAN PSYCHOLOGICAL ASSOCIATION, GOAL-DIRECTED LEADERSHIP--SUPERORDINATE TO HUMAN RELATIONS (74TH, NEW YORK, SEPTEMBER 1966).

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EFFECTIVE LEADERSHIP IN HIERARCHICAL ORGANIZATIONS MUST BE GOAL-ORIENTED. HIGH-LEVEL LEADERSHIP MUST DEFINE ORGANIZATIONAL GOALS AND CHANNEL ACTIVITIES TO ACHIEVE THESE GOALS. STUDIES WERE MADE BY HUMRRO IN MILITARY LEADERSHIP AND SMALL GROUP EFFECTIVENESS. IT WAS FOUND THAT POTENTIAL SQUAD LEADERS, SELECTED FOR ABOVE-AVERAGE INTELLIGENCE AND RATED BY PEERS AND COMPANY COMMANDERS, COULD BE TRAINED TO PERFORM AS LEADERS, BUT NOT MUCH COULD BE DONE ABOUT THEIR HUMAN RELATIONS. IN A STUDY TO IMPROVE RIFLE SQUAD AND PLATOON TRAINING, REQUIREMENTS FOR INTERPERSONAL COORDINATION SIMILAR TO THOSE IN COMBAT WERE INTRODUCED. GROUP TASKS TENDED TO DETERMINE GROUP STRUCTURE AND THE RIGIDITY OR FLEXIBILITY OF THE GROUP INFLUENCED COORDINATION REQUIREMENTS. IN CREW TASKS, WHERE MEN WORKED CLOSELY TOGETHER, THE ENVIRONMENT (DEMANDS OF THE MACHINE) PROVIDED FEEDBACK AND THUS FUNCTIONED AS A LEADER. IN TEAMS, SUCH AS RIFLE SQUADS, WHERE MEN WERE IN LOOSE CONTACT WITH EACH OTHER, TRAINING HAD TO BE GIVEN IN ASSESSING THE ENVIRONMENT AND ASSUMING LEADERSHIP WHEN NECESSARY. IN GROUPS WITH GOALS IMPOSED FROM ABOVE AND WITH AN APPOINTED LEADER (SUCH AS PLATOONS), LEADERSHIP BEHAVIOR INVOLVED INITIATING STRUCTURE AND PROVIDING FEEDBACK, WITH LITTLE EMPHASIS ON CONSIDERATION FOR OTHERS. IT SEEMS, THEN, THAT IN LEADERSHIP TRAINING, ONE MUST STUDY THE ENVIRONMENT AND DESIGN THE TRAINING TO FIT IT. (EB)

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Goal-Directed Leadership: Superordinate to Human Relations?

by

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Symposium Presentations at
Division of Military Psychology (Div. 19)
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Prefatory Note

Several research projects dealing with military leadership and with small group effectiveness have been conducted by the Human Resources Research Office within a military setting. These research efforts have led to a picture of leadership that integrates certain aspects applicable to several different levels within the military organization. This work has been discussed and extrapolations to leadership theory in goal-directed organizations other than the military have been made by HumRRO participants in an APA symposium on goal-directed leadership.

Dr. Carl J. Lange, Office of the Director of HumRRO, served as chairman of the symposium. Participants were Dr. T.O. Jacobs, Dr. Clay E. George, and Dr. Joseph A. Olmstead, of HumRRO Division No. 4 (Infantry), and Dr. Paul D. Hood, HumRRO Division No. 3 (Recruit Training). Dr. Fred E. Fiedler of the Group Effectiveness Research Laboratory at the University of Illinois was Discussant.

The research reported in the symposium paper by Dr. Olmstead was based primarily on work performed as a part of Work Unit HIGHLEAD, Training for Leadership at Senior Levels of Command; that reported by Dr. Jacobs, a part of Work Unit OFFTRAIN, Studies in Leadership and Leadership Training; and that reported by Dr. George, a part of Work Unit UNIFECT, Procedures for Increasing the Effectiveness of Small Infantry-Type Units. Research in these three Work Units was performed at Division No. 4 (Infantry), at Fort Benning, Georgia. Dr. Hood's symposium paper was based primarily on part of Work Unit NCO, Research in Support of Training of Potential Noncommissioned Officers, performed at Division No. 3 (Recruit Training), at Presidio of Monterey, California.

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THE VIEW FROM THE TOP--
THE DEMANDS OF ORGANIZATIONAL LEADERSHIP

Joseph A. Olmstead

This symposium is concerned with leadership in hierarchical organizations. Although each of the participants will discuss leadership from the viewpoint of a different organizational level, the central theme through all of the papers is that effective leadership within a formal organization is, of necessity, goal-directed.

Especially for those who have worked in large organizations, the statement that effective leadership must be goal-directed may seem to be rather obvious. Yet, many discussions of leadership either ignore, or give only superficial recognition to, the fact that a leader's actions must be governed by his organization's objectives.

It is not proposed to review the history of leadership theory here; however, certain trends in that history are particularly relevant to this symposium. Over the years, the development of leadership theory has been characterized by some sizable shifts in emphases. As in most instances where the pendulum of opinion swings rather violently, these shifts in theoretical emphasis have been accompanied by excessive stress, in practice, upon certain aspects of leadership to the exclusion of others.

Starting with parallel developments in psychology and sociology, the old trait theories of leadership and the Weberian model of bureaucratic organizations led, in actual practice, to the notion of the "great man" as leader and to emphasis upon job analysis and a proliferation of management procedures as the best means of getting work done. This was, in essence, "task-centered" leadership. Then, the Hawthorne studies started a swing to a new emphasis, which eventually took on the rubric "human relations." The trend started slowly, but, after World War II, it picked up speed with the expanding activities of the Harvard Business School. It was given tremendous impetus by increased inputs from psychology, particularly from group dynamics and the adherents of "functional leadership." Being somewhat prone to fads, the popular management literature and industrial trainers took up the new emphasis and carried it to the point where it began to seem that making everyone happy should be the sole concern of a leader. The requirements of organizational objectives and the pressures of organizational roles were almost completely ignored in discussions of practical leadership.

It is only fair to point out that, in their formal theories of leadership, many psychologists have given equal weight to objectives, task demands, and interpersonal relations. However, in their more

applied discussions of leadership, objectives and task demands have somehow usually been pushed into the background. Human relations always seem to have received most of the attention.

Now, we are beginning to see indications that the pendulum may be swinging back to a middle ground. What seems to be emerging is a superordinate concept that can be called "goal-directed leadership." According to this concept, the process of leading must be aimed at meeting organizational or situational demands. Responses to these demands, in turn, are dictated by the goals of the organization, or by the assigned objectives of the subordinate unit of which the particular individual is the nominal leader.

This does not suggest that either tasks or interpersonal relations can be ignored. Rather, both are highly important but subordinate aspects of a more encompassing notion--that leader activities, whether related to task performance or human relations, must be dictated by organizational goals. Thus, leader activities may differ in different organizations and different goal contexts. This concept is admittedly an offshoot of "situational leadership," but with a difference. Where situational leadership seems to be a sort of free-floating adaptation to the demands of constantly evolving situations, the goal-directed leader adapts his actions to situational demands in accordance with objectives of his organization.

The conclusions discussed in the remainder of this paper derive from a research project concerned with the high-level leadership of large military organizations. Through the use of role analysis techniques, the leadership activities of high-level military commanders were studied and analyzed. From the analysis, a conceptualization of the leadership role of a senior commander was developed. The generalizations about leadership that will be presented here are derived from this role analysis and comparisons of the role of military leaders with those of civilian leaders.

In formal organizations, leadership is the process of influencing the actions of individuals and organizations in order to obtain desired results. Thus, leadership is concerned with human performance. It is this emphasis upon performance that distinguishes the leadership aspect of the command or executive role from other components such as decision making and management.

At high levels, it is, of course, impossible for a leader to influence each member of his organization directly. Because of the large number of personnel involved and because of the many intermediate levels interposed between him and the lowest echelons, the high-level leader exerts his influence mainly through others. Although his ultimate aim is to influence the performance of operating personnel, he can most often do this only in an indirect way. Therefore, the high-level leader must be concerned with manipulating those organizational factors which can be influenced by him, and also with making his subordinates

as effective as possible, so that his influence will eventually spread down through all levels of the organization.

At senior levels, the effective exercise of influence involves three broad functions:

(1) Definition of the purposes of organization existence and of the goals to be accomplished.

(2) Creation of a viable organization distinctively adapted to these goals.

(3) Channeling of the organization's energies in directions that will lead to goal achievement.

It is in this realm of goal setting and organization building that the distinctive quality of high-level leadership is found.

Thus, it can be seen that effective high-level leaders are especially goal-directed. Because he both sets the goals and exercises overall responsibility for their achievement, the leader must be constantly aware of the demands and restrictions that objectives place upon his decisions and actions. Furthermore, he has the especially significant function of identifying and making operational the role of his organization, as indicated by the objectives, and of formulating the policies which translate these abstract ideas into action. A corollary activity involves interpreting these aims to everybody and infusing them into the internal structure of the organization. This requires that the character of the organization be shaped to suit the goals and that its members be sensitized to ways of thinking and responding so that goals genuinely serve as targets around which all efforts may be mobilized.

The development and maintenance of such an organization call for several closely related activities on the part of the leader. Among these activities are:

(1) Development of a homogeneous core of key personnel who can serve as the nucleus around which the organization can be built.

(2) Establishment of ground rules--desired ways of working together--within which personnel may operate.

(3) Development of an effective communication system through which the leader can interpret purposes, intentions, and reasons, reconcile interactions, and order internal conflict, thus stabilizing the organization and providing a basis for unity.

(4) Promotion of high levels of motivation for goal achievement.

In each of these activities, goal demands play an important role. None can be effectively performed without clear understanding of desired goals and the particular content of each will be determined by the specific nature of the goals.

In a similar way, the leader's attempts to channel the energies of his organization will be governed by objectives. For example, when he initiates action, arranges for changes, provides guidance, or communicates performance standards, goals determine both the direction and the nature of his actions.

In the final analysis, direction by goals is the only realistic approach to leadership of an organization. In any situation, a leader is most effective when he can address the concrete needs of the conditions with which he is confronted. He has to guide himself according to the reality of the situation. There are certain facts that must be taken into account and certain real existing conditions within which he must operate. In organizations, the reality is that objectives have to be accomplished. Otherwise, the organization would have no reason for being. Accordingly, if a leader tries to act as if these goals do not exist, or as if they were different than they are, he is doing nothing more than leading his organization down the primrose path to disaster.

From the standpoint of personnel, reality also governs. There is considerable evidence that personnel want leaders who can help them achieve their objectives. They prefer leaders who help their organizations define objectives and provide concrete assistance in achieving them. Compliance of personnel with a leader's attempts to influence depends, in part, on his ability to develop goals for overcoming the particular situation confronting the organization. If subordinates see the leader as possessing the competence to achieve organizational survival, goal accomplishment, and a desirable organizational environment, they give him the necessary support. If they do not see him as possessing these attributes, he loses their support.

When leadership is directed by goals, a leader is required to evaluate every action and every decision against the standard, "What will be the most likely effect of my decision and my action upon the ability of my organization to accomplish its objectives?" Since a high-level leader can justify his existence only by the results he obtains, he has failed if his actions do not favorably influence his personnel so that they perform the duties required for goal achievement. He has failed if he does not improve or, at least, maintain the performance capabilities of the organization entrusted to him. Goal accomplishment remains, of necessity, both the proof and the aim of his leadership.

Leadership at high levels involves more than the capacity to generate favorable attitudes among personnel, although this is an essential aspect. It is also more than steering an organization by

the routine solution of everyday problems, although this, too, is essential. Leadership becomes increasingly complex as one moves up in an organization, not simply because the problems are larger but because a different orientation is necessary. At high levels, a leader must be concerned with building and guiding a large, hierarchical organization. It is in this realm of building and directing a complex organization for the achievement of goals that the distinctive quality of high-level leadership is found.

THE APPRENTICE LEADER--PREPARATION FOR A ROLE

Paul D. Hood

Since 1962 the United States Army has selected and trained 8,000 to 10,000 men annually in a Leader Preparation Program specially designed to create a reserve pool of potential leaders in major combat and some of the combat support specialties (1). Leader Preparation Courses are now operating in every Army Training Center in the country. Within the past few months, this program has been enlarged to include all major combat support specialties--a move which will result in 25 to 35 thousand trainees a year receiving a 10-week experience in leadership preparation.

This training program is novel, if not unique, among the services, in that it does not train leader candidates or leader incumbents, but potential leaders. It is, quite simply, a preparation program. The program is also unique in that it was the pure result of applied research and development.

Clearly, we do know enough about leadership training to design and establish successful programs. What I would like to talk about is what doesn't get published in the usual journal article: How is such a program designed? What debt does it owe to research?

In 1957 the Army asked the Human Resources Research Office to find a systematic method for identifying and developing potential enlisted leaders as early as possible, preferably while they were still in the training centers. They wanted a program that would work for any military specialty. Unstated requirements were that the program should be inexpensive and acceptable to all concerned. As our experience grew, we realized this meant that the Department of the Army might give us training time, but the program had to pay off at the training center level.

Where do you start? Of course you review the literature--and here I want to acknowledge our debt to John Hemphill, Andrew Halpin, Cal Shartle, Ralph Stogdill, and others of the Ohio State Leadership Studies group. Thanks to them, it was evident that we needed to either find or train leaders who would initiate structure and also be considerate (2). Our thanks go to Ed Hollander as well as to the many others before him who had demonstrated repeatedly the value of Peer Ratings. The researchers associated with the Army Personnel Research Office, and their contractors, had provided specific information on Army leader criteria and potential selection instruments. Of course, there was a wealth of ideas from the fields of group dynamics, psychodrama, group problem solving, creativity training, and the predecessors of sensitivity training. There were also numerous industrial training programs, as well as the

various leadership courses used in the military services. Finally, we could draw on ideas which had been developing within HumRRO, especially the OFFTRAIN studies discussed by Dr. Jacobs (3, 4).

We checked the state of the art in terms of military capabilities and defining job requirements. This was accomplished through visits to a dozen NCO training academies (5) and through critical incident interviews with hundreds of superiors and subordinates of squad leaders in units in the United States and overseas (6).

In about a year we had our background. By then we had made several assumptions that were to narrow the scope of our work considerably (7).

(1) First, we decided that the program would be selective. Leadership studies had clearly developed the ideas of functional and participant leadership, but mainly in ad hoc, voluntary, or highly permissive groups. On the other hand, the hierarchical, authoritarian, mission-oriented organization of combat units, sometimes operating under stressful conditions, required a chosen leader--preferably one who was competent, confident, and respected. If he was well-liked, fine; but that was secondary. Selection and training had to be concerned with ability, achievement, and acceptance by both followers and superiors.

(2) The second major decision was that we wanted to use a functional and situational approach rather than a formal and trait approach in training. This may seem a strange idea to those of you who are not familiar with Army military leadership, but the current Field Manual has an entire chapter on traits, including bearing, courage, decisiveness, dependability, endurance, enthusiasm, initiative, integrity, judgment, justice, knowledge, loyalty, tact, and unselfishness. We despaired of doing much to change anyone in a significant way on any of these traits in a matter of a few weeks--especially if the presentation was by a conventional classroom approach. So, our training program is "traitless." We depend on selection to find men who have already developed acceptable character. What we did see as reasonable was the effort to provide the potential leader with knowledge and skills which would be useful. In the language of the current Army Field Manual, we emphasized leadership principles such as: "Know your men and look out for their welfare," "keep your men informed," "set the example," and "learn to train and supervise your men." But we dealt with these principles by illustrating their use in concrete situations which our own surveys had shown to be both frequent and important for the neophyte Army leader.

(3) This led us to our third major decision: We tried to build a training program that emphasized practical work and real experience in preference to lectures and conferences. This was accomplished by rotation of jobs, simulations, and practical exercises during two weeks of preparation, and by actual on-the-job training under supervision for eight weeks as a junior leader with real, permanent followers.

(4) Our fourth decision was really a recognition of a "given." Our program could not, as do most leader training programs, work on remediation and skill enhancement of present leader incumbents or candidates. We had to start from the very beginning; also, following eight weeks of on-the-job training in a leader role, our trainee would revert to a follower role for many months. We had to instill fundamentals, train for retention, and be careful not to create unrealistic expectations. We could not promise our men anything more than a chance to learn.

(5) We also decided to include technical training in our program, since the lowest-level enlisted leader must be proficient in the skills and knowledges of his specialty. All aspects of the leader's job were to be considered, both technical and managerial.

(6) Finally, we recognized that we would have to cope with social change. We had to create opportunities for a wider scope of trainee leader responsibility in the Army Training Center. This implied changes in attitudes, procedures, job descriptions, and command emphasis. Persuasion and pressure were required to secure accommodation, and there was a massive re-education and selling job. But, this requirement also implied accommodation in the design of our program. We had to produce leaders who could accomplish assigned missions--whether it be cleaning the day room, supervising a construction detail, or leading a squad on a training patrol.

Three years of experimentation, of successive modification in the program, were required before we found a practical and durable solution (8, 9, 10). In brief outline, here it is:

(1) Select leaders who are in the upper half of their specialty aptitude area. We don't need an unusually bright man, but he should be a good bet to succeed in the technical aspects of his work.

(2) Select leaders who are in the upper half on peer ratings on leadership. Each year over 300,000 basic trainees rate each other in squad-size groups to get these data, and it is indeed a compliment that the Army has accepted this method. As you might expect, this is our most potent all-around predictor of leader success. Favoritism and spite contaminate the ratings, but they are still the most useful measure we have found.

(3) Include the company commander by permitting him to delete names of proposed candidates for the program where there is clear evidence that the man is unfit. Conversely, the company commander may add names where there is equally clear evidence that the man is qualified, despite ostensible low aptitude or "buddy" rating. This last element does not play a large role, but does serve to correct apparent injustices and does leave a command element in the method.

Basically, we are choosing men who possess objectively assessed aptitude and who have won the respect of their fellow soldiers within

five weeks of basic training. These men on completion of basic training are assigned to a two-week preparation course. As in all military academies, there is a certain amount of drill and discipline with an emphasis on smart appearance, and immediate and full compliance to orders. This is part of the larger Army system--a conformity demanded of every officer and leader. But this school training is kept in perspective, tuned to the experience of the trainee and to reasonable standards similar to those he will encounter in his later training assignment.

The bulk of the two-week preparation training deals with an effort to develop practical squad leader skills. Approximately 25% is devoted to technical subjects appropriate to the candidate's military specialty--weapons, tactics, dismounted drill, and so forth. Much of this content is taught with the intent to prepare the candidate as an assistant instructor. It also serves as a potent confidence builder. The remaining 75% is oriented to general leadership and managerial skills, such as planning, organizing, communicating, supervising, instructing, and counseling. Part of this material is covered by lectures, group discussions, and similar classroom procedures, but a large segment is presented through practical exercises and critiques--in real and simulated missions in the garrison and in the field.

Following successful graduation from the preparation school, the men are assigned as squad leaders or trainee assistant platoon sergeants in Advanced Individual Training companies, where they spend eight weeks in on-the-job training under company cadre supervision. They perform the traditional trainee leader roles, but because of their preparation, they are able to assume greater responsibility in the management and training of their followers.

Each step of the way in the development of the program was a product of collaboration between civilian behavioral scientists and professional military trainers. Before field testing was completed, our data numbered into the hundreds of trainee leaders and thousands of their followers. When our data analyses were concluded, we had results on criteria which included follower, peer, and superior evaluations; scores on leader and follower proficiency in military specialty tests; results of a graded field leadership exercise; measures of esprit and of morale; and follow-up ratings by superiors one and one-half years later.

These results confirmed the value of our selection methods, showed that the experimental training programs were superior to those of the experimental control groups, and indicated which of three leader programs was the best in cost-gain terms. But, I would hasten to add that we also found there were significant differences between companies and platoons-within-company, as well as some changes over the 10-month experimental period. We also had interactions "coming out our ears"--platoons varied within companies as they moved from treatment to treatment. We were glad that we had used several controls, since we obtained a negative Hawthorne effect--some of the sergeants didn't like working with trainee leaders who were not their own choice, and the data showed

it. But, the experiment results did tell us what changes to make, and we received enthusiastic support on the troop use test.

In summary, what can we say of this research and development effort? Our experience over the past five years and our earlier experimental data leave the impression that we can do relatively little (at least in this context and by these means) to enhance the "human relations" ability of our candidates. Our experimental leaders are generally no better than the equated controls in the estimation of their followers when it comes to human relations.

On the other hand, we certainly can train leaders who "accomplish the mission." On some of our criteria we got differences at the .001 level. The practical significance of these differences is attested by the Army's adoption and expansion of the program.

It must remain clear, though, that such training programs have to be tailored to and validated in the system where they are to be used. Our studies show that it is exceedingly difficult to produce substantial differences in real field situations on relevant and highly valued criteria. Moreover, the introduction of any real and significant effect is bound to meet resistance and these social change problems must be solved.

Previous research information was of great value in our planning, but much had to be invented or adapted to meet the particular needs of the system. Above all, nothing could replace testing and proving under controlled field conditions.

Our HumRRO experiences in preparing the neophyte leader indicate that it can be done successfully--at least for goal-directed organizations.

Literature Cited

1. Hood, Paul D. Implementation and Utilization of the Leader Preparation Program, HumRRO Technical Report in preparation.

2. Hood, Paul D. Leadership Climate for Trainee Leaders: The Army AIT Platoon, HumRRO Research Memorandum, August 1963.

3. Jacobs, T.O. A Program of Leadership Instruction for Junior Officers, HumRRO Technical Report 84, June 1963.

4. Lange, Carl J., and Jacobs, T.O. Leadership in Army Infantry Platoons: Study II, HumRRO Research Report 5, July 1960.

5. Kern, Richard P. Observations on a Number of Noncommissioned Officer Academies, HumRRO Staff Memorandum, May 1958.

6. Showel, Morris, and Peterson, Christian W. A Critical Incident Study of Infantry, Airborne, and Armored Junior Noncommissioned Officers, HumRRO Staff Memorandum, July 1958.

7. Hood, Paul D. Research on the Training of Noncommissioned Officers. Progress Report NCO I, HumRRO Research Memorandum, July 1960.

8. Hood, Paul D., Kern, Richard P., and Showel, Morris. Research on the Training of Noncommissioned Officers, A Summary Report of Pilot Studies, HumRRO Technical Report 65-17, December 1965.

9. Hood, Paul D., Showel, Morris, Taylor, John E., Stewart, Edward C., and Boyd, Jacklyn. Preliminary Assessment of Three NCO Leadership Preparation Training Systems, HumRRO Technical Report in preparation.

10. Hood, Paul D., Showel, Morris, and Stewart, Edward C. Evaluation of Three Experimental Systems for Noncommissioned Officer Training, HumRRO Technical Report in preparation.

THE VIEW FROM THE UNDERSIDE--TASK DEMANDS AND GROUP STRUCTURES

Clay E. George

INTRODUCTION

The work reported here was performed with the ultimate aim of improving rifle squad and platoon training. This was done by introducing into tactical exercises requirements for interpersonal coordination similar to those that exist in combat. Outcomes of this and of earlier research have indicated that leadership behaviors are required of nominal followers in group tasks calling for nonsequential coordination. Group tasks tend to determine group structures and there are two aspects of structure which directly influence coordination requirements.

These aspects are degree and rigidity of structure. Degree of structure refers to the number and distinct roles and hierarchical

TWO ASPECTS OF SMALL WORK GROUP STRUCTURE

		Rigidity of Structure: High	Rigidity of Structure: Low
Degree of Structure	High	Crews	Teams
	Low	Kindergarten Class	Nondirective Therapy Group

Figure 1

levels within groups of fixed size. The rigidity-flexibility dimension has to do with role specialization, the feasibility of role exchange, and the effects on performance of one member's act of compensating for another. We call highly and rigidly structured groups "crews"; highly but flexibly structured groups "teams." While we have no generic names for the relatively low structured groups, examples can be given. A kindergarten class is said to have a low degree of structure because there are only two roles: teacher and pupil. It is considered to be rigidly structured since teacher and pupil are hardly likely to exchange roles. In a seminar, or therapy group, on the other hand, the professor or therapist role might be increasingly shared by other group members over time.

COORDINATION REQUIREMENTS

In addition to differences in structural rigidity, crews and teams also differ in the type of coordination requirements typical of the

tasks they perform. Coordination requirements tend to be sequential in crew tasks; that is, one or more cues are received from a machine or another crewman and the actor has a pretrained response to make. Crewmen generally work in a restricted space, frequently within or in fixed positions around a machine, and are able to communicate with one another. They can pretty well predict what response they must make and when to make it. Team members--and this is particularly true of rifle squads--are not tied together by a single machine, are not typically in easy sensory contact with one another, and cannot easily predict what response they may have to make at any given moment.

A series of experiments by Horrocks, Krug, and Heerman (1) tends to show that small groups generally perform equally well whether or not members try to compensate for one another, or otherwise go beyond stereotyped and leader-directed coordination. Havron and McGrath (2), on the other hand, have reported that rifle squads can be made to perform much more effectively if members are instructed to suggest appropriate orders to the leader under stress conditions. If member-initiated coordination worked in squads, why didn't it work in the groups studied by Horrocks et al. (1)? Careful study of the research reports led to the conclusion that the Horrocks groups were essentially crew-like in structure and function while Havron's squads (2) were more team-like.

Our own studies included experiments with groups working in structures and on tasks distributed over several points along the crew-team continuum. In one such experiment it was found that five-man groups solve problems in wheel communication networks most rapidly when the keyman, or central coordinator, scored in the group direction on a measure that differentiated between motivation for personal achievement and motivation for group achievement.

Another study, with four-man groups working under more team-like conditions, showed that men highly motivated toward group achievement took more time per response, and were more likely to respond for other team members to the minimum extent required by the tasks, than were those less highly motivated for group achievement. Further studies showed that groups high in group achievement motivation perform better on tasks requiring coordination (including compensation) than do others, that this motivation score is not related to intelligence or educational level, and that the score correlates with peer ratings on task contributions.

A small group leader is likely to have a limited amount of authority, relatively few formal sanctions at his command, but a good deal of responsibility. In this, he is much like the keyman in a wheel network: His group is likely to perform better if he is motivated to get the group job done and if the other workers are also so motivated. Fortunately, this motivation is fairly easy to acquire by merely arranging conditions so that men are required to work together to complete a job. Two of the items scored for group achievement motivation are shown here.

1. Other things being equal, it is better to be:

   (a) the outstanding member of a group
   (b) a member of an outstanding group

2. I would rather be known as:

   (a) a successful person
   (b) a good team player

While we have been very much interested in motivational variables, our primary concern has been to make experimental--and eventually training--conditions so efficient that men will develop coordination regardless of their initial motivational levels.

INFANTRY SQUAD TRAINING PROTOTYPES

Our observations of training and our analyses of many accounts of small unit combat actions, led to the realization that squad members require specific training in maintaining awareness of events going on within the squad and in the extrasquad environment. In effect, the infantrymen must search for, and respond to cues from, the extrasquad environment; then check with other squad members and respond appropriately.

The man's response to what he observes will depend on his present role and on his assessment of the situation. If he notes that his team leader has become a casualty, and he is the next senior man, he will take over that role. If he notices that an adjacent rifleman is in a good position, he may tell that man to cover his own next rush. In the latter instance he will be making a leadership attempt. If our man sees or hears that the adjacent rifleman's weapon is not functioning, he may increase the area over which he distributes his own fires, thus compensating for another's incapacity to contribute in full.

When training problems are conducted over an open, level field and nothing goes wrong with men or weapons, the squad can function much as a crew. Men can communicate well enough in such circumstances to remain under leader direction, and leaders can control their coordination. When, on the other hand, operations are conducted over rough, heavily overgrown terrain and men and weapon capabilities change rapidly and unpredictably, then individual initiative is required to coordinate responses--including leadership acts from the lowest ranks.

Our problem then, was to develop tactical training for use over difficult terrain which would include such emergencies as casualty assessment and weapon malfunction. The first training prototype involved four sets of emergency events counterbalanced over four trials so that each team of five men met a different set on each trial and every team had reacted to every set during the course of the problem. Each team, or half-squad, was first given a conference on fire distribution, which included response coordination and search-fire-check elements. The men were then told that they would advance in line

formation until they received blank machinegun fire. They were then to put live fire into an area delimited by four pop-up targets. The targets were dropped after 15 seconds, but the five-man team continued to provide a base of fire for an imaginary team moving against the simulated enemy.

Immediately after the shooting started one team member was taken out of action as a casualty by an umpire. Soon after, a number of preprogramed weapon failures began to occur. Through all of this, the team was expected to maintain a steady volume and a good distribution of fire. Three observers noted and recorded the coordinating behaviors of the five team members in response to each emergency. Unknown to the subjects, a 48-meter length of three-feet-high screen wire had been stretched across and in front of the target area; a measure of fire distribution was obtained by counting the number of hit wire sections out of 64 equal-area sections (the wire had been divided into sections by camouflage paint).

It will be noted in Figure 2 that coordinating behaviors, which include leadership from below, are related to criterion fire distribution scores. Therefore, it was concluded that, to the extent that men

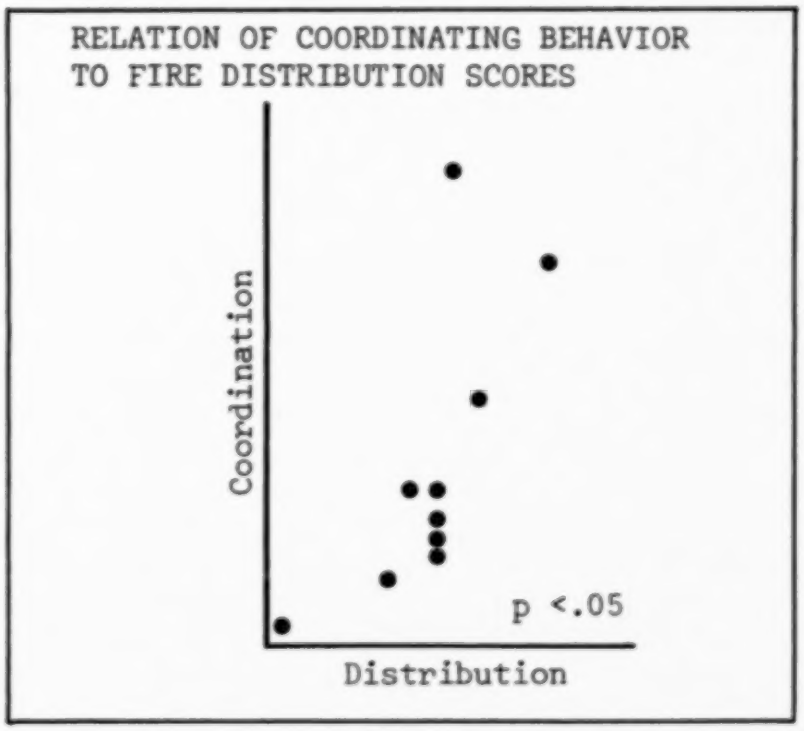

Figure 2

show initiative in coordinating their responses to emergencies and follow one another's leadership attempts, the team excels on tasks of the kind described.

A second experiment was conducted with eight full squads, each studied for one day. Control squads participated in a conference on rifle squads in the attack, ran one dry fire and one blank fire problem in the morning. Experimental squads received the same training with the following exceptions.

(1) Some of the typical military content of the conference was replaced by an emphasis on search-fire-check.

(2) The dry and blank fire exercises included some minor emergencies.

(3) The critiques of the exercises emphasized intra-team coordination.

In the afternoon of the experimental day, the squads were taken to a densely wooded attack range they had not previously seen. Control squads ran a live fire attack problem without emergency events and were not critiqued on coordination beyond that ordered by leaders. Then they ran the same problem with emergency events. Experimental squads ran both afternoon problems, each with a different set of emergency events, and with a critique emphasizing coordination--including initiative and the leadership responsibilities of every man. Approximately a one-fifth sample of the lateral area fired into was screened in order to obtain an estimate of fire effectiveness. Three observers followed each squad to note and record coordinating behaviors.

COMPARISON OF EXPERIMENTAL AND CONTROL SQUADS

Number of Effective Hits Counted	EXPERIMENTAL	CONTROL	
45	E		
44			
43			
42			
41			
40			
39			
38			
37			
36	E		
35			
34			
33			
32			
31			
30	E		
29			
28	E	C	
27		C	
26			
25			
24			
23			
22			
21		C	
20			$p < .05$
19		C	

Figure 3

As shown in Figure 3, experimental and control squads did differ significantly on the final problem. It is apparently the case that, if you want men to coordinate under the pressure of emergency events, you should train them to respond appropriately to such events.

CONCLUSIONS

When a work group, whether crew- or team-like, is formed in the laboratory, the motivational characteristics of both leader and members are important determinants of performance. But, when team-like groups are studied while carrying out activities of great importance and face validity to them, prior motivational states appear to be less important. What is important in this case is specific instruction on coordinating behaviors such that team members become fully aware of their responsibility to compensate for the inabilities of others, whether these be temporary or permanent, when and only when, the situation calls for it. Properly critiqued practice on problems requiring coordination will produce the desired results.

LITERATURE CITED

1. Horrocks, John E., Krug, Robert E., and Heerman, Emil. Team Training II: Individual Learning and Team Performance, U.S. Naval Training Device Center, Port Washington, N.Y., August 1960.

2. Havron, M. Dean, and McGrath, Joseph E. "The Contribution of the the Leader to the Effectiveness of Small Military Groups," in: Leadership and Interpersonal Behavior, Petrullo, Luigi and Bass, Bernard M. (eds.), Holt, Rinehart, and Winston, New York, 1961.

THE MAN IN THE MIDDLE--A MIXED ROLE

T. O. Jacobs

In the first of the symposium papers, Dr. Olmstead emphasized an extremely important point, that the process of leading must be aimed at meeting organizational or situational demands. I will give this point substantially more emphasis.

For present purposes, it is possible to distinguish two general kinds of groups differentiated by whether an external authority imposes goals on the group, which, if not met, will result in negative sanctions of some sort. I think one basic thesis of this symposium is that the research literature does not reflect sufficient recognition of this distinction, and its implications, though it does reflect a more general awareness that the nature of environmental demands will determine the actions of both individual group members and the leader. The problem is that this general awareness has not sufficiently often been translated into the effort required to conduct a careful analysis of the exact demands the situation places on the group. This, in turn, has led to the reporting of apparently divergent findings.

When groups do not have goals imposed from the outside by an authority with the power to enforce compliance, their leaders generally are group members who emerged from within the group. Such groups do not generally have appointed leaders because in the absence of power to enforce imposed goals, an outside influence or authority would similarly lack power to enforce its choice of a leader.

However, we are concerned at present with groups that have imposed goals. Such groups generally exist as a part of a hierarchical organization, which brings the group into being because of a perceived need the group can satisfy. It thus has goals to impose on the group, and the group serves a purpose for the larger organization only by accomplishing these goals.

The organization, or authority, then needs a representative within the group, to serve as a point of contact for upward and downward flow of information relating to goals and other things. It typically is one responsibility of this representative to ensure that the group's resources are utilized in some minimally efficient manner to accomplish organizationally imposed goals, or objectives. Because this person's allegiance is to the organization and not to the group members, the organization typically assumes as its prerogative the designation of the person who is to fill this role. Thus, such groups typically have as leaders persons who have been appointed by the outside authority

responsible for the imposition of goals. Of course, there may also be emergent (i.e., informal) leaders within such groups, but they exist only in addition to the appointed leaders.

As is the case with emergent leader groups, a great deal of work has been done with appointed leader groups, that by the Ohio State group, the Michigan group, and somewhat more recently, by Dr. Fiedler and his colleagues at the University of Illinois, these being three of many possible examples. However, I would advance the thesis that in a good deal of this work, insufficient attention has been given to analysis of environments, and the impacts of these environments on patterns of intragroup behavior and subsequent leader behavior. Dr. George has indicated a substantial degree of concern with this problem, and differentiated two kinds of groups, crews and teams. Fiedler (1) made a similar differentiation, between interacting and coacting groups.

Both differentiations are based on the intragroup behavior of the members as they accomplish group tasks. George characterized crews as having systematic, rote behavior imposed on group members by equipment served by the group. I would propose taking this analysis one step further, and hypothesize that the crew designation fits any aggregate on which external forces have imposed a systematic, rote process. Thus, it might be possible also to consider production line workers as crews, because the production process systematizes group member actions. Similarly, a debate team probably is a team during the early part of its competitive season, when team member roles are being defined, but probably becomes a crew after roles become well defined.

It would appear from informal analysis of the environments of crews and teams that perhaps a key variable is the nature and degree of feedback received from the environment by the group and its individual members. It would appear that crews are characterized, not only by a process that binds their actions, but also by an environment that provides rich feedback to the individual as to the adequacy of his actions, enabling him to judge for himself the quality of his performance. If evaluation of performance can be judged to be a leadership function, the environment can be said to have taken over some of the nominal functions of the leader.

If the environment does not provide such feedback, this function must be performed by a person, either the appointed leader or someone who emerges as a leader for this purpose. This seems to be a reasonable ad hoc rationale for the kinds of training treatments George gave his infantry squads. In combat or combat-like situations, the leader cannot spread himself sufficiently thin to provide such feedback to all squad members on a continuing basis. There is a resulting need to train individual squad members to initiate individual leadership acts of this type when such acts would benefit the squad and are not already being performed.

The second and third papers of the symposium have dealt with leadership in such groups, and have shown that leadership acts within the

infantry squad are generally shaped by a concern for accomplishment of assigned tasks. My paper will deal with groups at an organizational level one step higher, the infantry rifle platoon. These platoons were studied early in a training cycle, and the results to be reported are of a factor analysis of leader behavior descriptions. In terms of Dr. George's earlier description, these are highly structured groups, with a high degree of structural rigidity under normal circumstances; while this combination would normally produce a crew, in his terminology, it does not in this particular case because the nature and degree of feedback furnished by the environment to the individual platoon member is such that he cannot judge for himself, at least at this stage of training, the quality of his own performance. The factor structure that emerged will reflect this.

PROCEDURE

In an earlier study by Lange, et al. (2), platoon members had been asked to describe the actions of their platoon leaders in numerous situations, such as assigning duties to be performed, reacting to completed tasks, reacting to tasks during the process of completion, and so forth. Data were also volunteered in the interview protocols regarding other situations than those about which platoon members were asked. These protocols were edited to remove evaluative material, and then were content analyzed to identify categories of leader behavior. These categories served as the basis for development of a leader questionnaire which was administered to the subjects in a subsequent activities study (3). The questionnaire items were written in the form of behavior statements, and the information requested from the subjects was how many times they had observed their platoon leader to do each during the past month.

Thus, the variables in the activities study consisted of reports of frequency of occurrence of various kinds of leader behavior as observed by subordinates over a standard period of time. Subjects were 257 enlisted members of 46 platoons at Fort Riley, Kansas.

There were seven areas of leader behavior in the Leader Activities Questionnaire (Figure 1). Defining consisted of either imparting information or assigning tasks, the kinds of activities that were categorized in the Ohio State studies as initiating structure. Pre-task motivation consisted primarily of appeals for good performance or warnings against poor performance. Post-task motivation dealt with rewarding, or punishing actions, either tangible or intangible, that a platoon leader took as a consequence of his men's performance on assigned tasks. Handling disruptive influences was oriented toward the kind of behavior that would have been classified in the Ohio State studies as "showing consideration." It dealt with the behaviors of the platoon leader in helping his subordinates handle problems which were both work related and non-work related.

Area V speaks for itself. Information-getting activities were hypothesized to be important because a leader could hardly form reliable

AREAS OF LEADER BEHAVIOR

I. Defining

II. Pre-Task Motivation

III. Post-Task Motivation

IV. Handling Disruptive Influences

V. Getting Information

VI. NCO Use and Support

VII. Other Leader Behaviors

Figure 1

judgments with regard to dispensation of rewards and punishments without accurate information regarding performance. NCO use and support concerned the platoon leader's support of the decisions of his NCOs, and the extent to which he delegated the making of work assignments to them rather than assigning tasks to the platoon himself.

In Area VII we include a number of less behaviorally oriented variables which turned out to correlate quite highly with the criterion variable. Thus, I would not argue that these represent leader behaviors; it may well be that they represent a generalized attitude toward the leader which incorporates much the same variance as the criterion measure.

This criterion measure, incidentally, consisted of a rating by each platoon member of his platoon leader on a scale from one to six on three items--how good he was judged to be as an all-around leader of the platoon, how well he handled emergencies, and how the respondent would feel about going into combat with him.

Among other analyses, 13 of the variables from the Leader Activities Questionnaire were excluded leaving 40, plus the criterion measure. These were intercorrelated, yielding a 41 x 41 matrix. A principal axis factor analysis was conducted on this matrix, with a varimax rotation. (Kaiser, 4, 5).

RESULTS

The factor analysis and rotation yielded four factors. Because of the relative indeterminancy of factor solutions, I have yielded to my own personal biases in naming these variables.

FACTORS

1. Positive Performance-Oriented Structure (Direction)
2. Negative Performance-Oriented Structure
3. Stability-Oriented Structure (Actions)
4. Performance Evaluation

Figure 2

Factor 1 received loadings by the variables shown in Figure 3. This factor, which I have called "Positive Performance-Oriented Structure by Direction" cuts across three of the leader behavior dimensions

FACTOR 1--Positive Performance-Oriented Structure (Direction)

	.88	Critiquing
A	.88	Explaining Reasons for Actions
	.85	Checking Reasons for Failure
	.84	Positive Postmotivation Intangible
	.82	Positive Premotivation Intangible
B	.77	Positive Postmotivation Tangible Promised
	.77	Public vs Private Negative Reinforcement
	.75	Negative Postmotivation Motivational Failure
	.75	Checking Performance of Men
A	.74	Making Standards Clear
	.73	Maintaining Welfare of Men
C	.73	Maintaining Upward Communication
	.72	Take Action on Problems
A	.71	Defining Specificity
B	.71	Positive Postmotivation Tangible Given

Figure 3

that were included in the original leader activities questionnaire (3). The A grouping contains variables originally labeled as "defining variables." That is, these variables include items which relate to structuring of the environment, particularly transmitting information about performance expectations, prior performance, and the technical content of the tasks at hand. The B grouping consists of motivational variables, almost all of which are positive. The leaders who scored high on these

areas typically were indicated by their subordinates to have used positive reinforcements a relatively high number of times. The exception, which loaded .75 on this factor, was negative post-motivation motivational failure. It reflected punishment given, but punishment given to a soldier who had failed to try sufficiently hard, as opposed to a soldier who had tried hard but failed as a result of lack of ability. It is quite interesting that this variable, which actually reflects dispensation of punishments, should be included in a cluster with positive reinforcement variables. Equally interesting is that this variable correlated .42 with the criterion rating measure in the original study.

The variables labeled "C" reflect primarily the leader's action in helping to solve the problems of his men, which might be either duty related or non-duty related.

While it is not too easy to characterize in a single unifying descriptive phrase the kinds of leader behaviors included within this general dimension, they appeared to reflect positive, goal-oriented leader behaviors. They are definitely performance-oriented, and the high proportion of positive reinforcement variables would appear to indicate a positive leader orientation toward obtaining performance in desired directions.

VARIABLES	Loadings	Intercorrelations			
		1	2	3	4
1. Criterion	.33	-	-.74	-.71	.72
2. Shook Up	-.24		-	.72	-.67
3. Submissive	-.07			-	-.63
4. Consistency	.08				

Figure 4

There were four variables that can reasonably be regarded as marker variables denoting affective orientation of subordinates toward the leader (Figure 4). One of them obviously is the criterion rating. The other three are from the last category of leader behaviors. "Shook up" was a frequency count of the number of times the leader was visibly shaken by an occurrence. "Submissive" was supposedly a count of times when the leader allowed circumstances to overwhelm him. "Consistency" was supposedly a measure of the predictability of the leader's actions. These four variables intercorrelated sufficiently highly that one might suspect that there is little unique variance in any one of the individual variables. It is of particular interest to examine their loadings on Factor 1. As is shown in Figure 5, they were quite low.

FACTOR 2--Negative Performance-Oriented Structure	
.91	Negative Postmotivation Tangible Heavy Total
.88	Negative Postmotivation Tangible Heavy Warn
.81	Negative Premotivation Tangible
.80	Negative Premotivation Intangible

Figure 5

Factor 2 received loadings of .70 or higher on only four variables, although it accounted for 23% of the total variance in the matrix. I have characterized this factor as indicating leader behaviors oriented toward obtaining performance by subordinates, through the use of negative incentives. This factor seems to be moderately clear-cut. It is quite interesting that the factor did not emerge as the negative pole of Factor 1. In fact, the principal axis solution yields factors which are orthogonal. I have not checked to determine the correlation between the factors after rotation, but these correlations theoretically ought to be moderately small. Again of interest are the four affective marker variables (Figure 6) which also did not load on this dimension.

FACTOR 2--Marker Variables	
Criterion	.23
Shook Up	.20
Submissive	.15
Consistency	-.22

Figure 6

The third factor, called "stability-oriented structure" by leader actions, is a quite interesting factor (Figure 7). All four of the

FACTOR 3--Stability-Oriented Structure (Action)	
.84	Defining Clarity
.82	Criterion Rating
.79	Modeling Ability
.77	Consistency
.70	Hardship Support
-.59	Negative Intangible Emotionality
-.64	Negative Postmotivation Intangible
-.80	Shook Up
-.82	Submissive

Figure 7

affective marker variables appear here, with the criterion rating and the "consistency" variable showing up on the positive pole and the "shook-up" and "submissive" variables with almost equally high loadings on the negative pole. The other positive loadings are of substantial interest. The first deals with the clarity of the leader's communication acts. Modeling ability deals with his expertise in furnishing a behavioral example of the standards he wishes achieved. Hardship support is a similar kind of thing, reflecting a sharing of hardship suffered by the men within the platoon. Two negative loadings below .70 are included because of the extent to which they help in interpreting this factor. Both of the negative variables reflect irrationality and extrapunitive reactions toward performance. It appeared that the high positive variables should work to produce a stable climate of predictability within the platoon, and that the variables loading high and negative would operate to produce an element of unpredictability or uncertainty.

Because of the extreme high loading of the criterion on this factor, it seems reasonable to conclude that leader behaviors which operate to produce this kind of stability within the platoon probably account for most of the variance in the criterion, and, in turn, for most of the affective reactions of the platoon members toward the leader. However, this factor accounted for only 5% of the total variance within the matrix.

FACTOR 4--Performance Evaluation	
.82	Post Task Reinforcement Appropriateness
.76	Reaction to Performance

Figure 8

Factor 4 also accounted for only about 5% of the variance, and, in addition, was quite difficult to interpret because it appeared as though these variables logically should have been a part of one or another of the preceding three factors. The two variables loading high on this factor reflect the appropriateness of the leader's performance evaluation and subsequent reactions to platoon member performance.

FACTOR 4--Marker Variables	
Criterion	.04
Shook Up	.14
Submissive	.08
Consistency	-.16

Figure 9

The four marker variables do not load at all on this factor (Figure 9).

DISCUSSION

One of the principal criticisms of factor analysis is that the outcomes cannot be regarded as unequivocal. However, in the sample of leaders in this study, there were four dimensions of leader behavior, two of which accounted for most of the reliable variance. These dealt respectively with positive task-oriented structuring, and with dispensation of negative consequences for poor performance. The criterion variable did not load on either of these.

The only dimension that did have a high loading by the criterion variable, the third, seemed to consist of leader behaviors instrumental in producing stable subordinate expectations, and leader actions of sharing subordinates' problems and hardships.

In relating these factors to the familiar "Initiating Structure" and "Showing Consideration" dimensions, one finds that there is no perfect relationship, but that the first, second, and fourth are similar in content to "Initiating Structure" and the third to "Showing Consideration." Thus, these two sets of findings are passably relatable, and we are then confronted with the question of "So what?"

At HumRRO we are heavily concerned with training. Those of us in leadership research are concerned with leadership training. When designing training, there is clearly the question of what should be included in order to produce the biggest payoff. Many, if not most, of the current industrial leadership and management training programs seem to emphasize the "Showing Consideration" dimension quite heavily, although I am forced to admit that the pendulum seems to be swinging more and more to the compromise position of emphasizing both. Blake's management grid is a good example (6). Nonetheless, it appears that the readmission of "Initiating Structure" into the fold of legitimacy is a grudging one.

However, examine the results of the present study in this light. At least within the environment and with the type of group studied, it appears that nearly all of the reliable variance in leader behavior was concerned with "Initiating Structure," broadly conceived, and only a trivial amount with the "Showing Consideration" kind of dimension, though the latter does contain all the reliable criterion variance.

The reason is, of course, indeterminate. These findings may have resulted from the fact that the leaders in the present sample simply were derelict in performing those kinds of leader activities that would have led to better subordinate morale. Or, they may have resulted from the fact that the particular environment with which we are presently dealing required leader behaviors of the type shown. If the former is correct, then this paper is based on a sample of poor leaders and proves nothing. If the latter is correct, then this is one situation in which leaders trained to engage in a high proportion of "Showing Consideration" behaviors at the expense of "Initiating Structure" behaviors would have behaved maladaptively.

Of these two, the second interpretation seems more desirable, because it reflects the fact that the environment does shape the leader's behavior, and that within appointed-leader groups, the organization must be satisfied as a first priority, and subordinates as a second priority--although in real life each apparently has been ready to compromise with the other to achieve maximum mutual payoffs. If correct, this is a very significant conclusion, because it would mean that the psychologist who is going to design leadership training cannot go to the body of leadership research and absorb from the work of his predecessors the ideal formula for such training, but rather must first analyze the client's environment, and then tailor leadership training to fit. I would predict that Fleishman, Harris, and Burtt (7), if present, might affirm this.

There are some interesting studies in the literature that seem to support this kind of conclusion, although it should be noted that I am selecting only those that support it. Halpin (8), using a form of the Leader Behavior Description Questionnaire, related the leadership behavior of airplane commanders to crew performance and morale in training and combat. In combat, the effective commanders were those who scored relatively higher on initiating structure and relatively lower on showing consideration, a reversal in direction from the situation in training, where stress was presumably lower, and also a reversal of direction of the expected shift from the training situation. It is interesting to speculate that the environment required more initiation of structure, and that the aircrews recognized this. Given this interpretation, the more effective aircraft commanders were perhaps those who recognized environmental demands and behaved accordingly.

In another study, Hamblin (9) hypothesized that morale in autocratic structures is directly related to leader competence and that, under stress, groups with competent leaders might actually have better morale if the groups are autocratically structured, with (my interpretation) relatively more "Initiating Structure" and less "Showing Consideration." This hypothesis was confirmed.

Torrance (10) reported a fascinating set of observations on a group of 26 men in survival training who were trapped in a blizzard. Initially, these men had been divided into groups alphabetically, with leaders assigned on the basis of military rank within the groups. During the entrapment, the structure of the total group changed radically, the artificial subgroups disintegrating, and other subgroups forming so that the more capable men associated and worked with each other, leaving the less capable men to fend for themselves. Seven subgroups emerged, two of which accounted for 90% of the members' leadership choices, and for 85% of the choices as "best able to take care of self in survival emergency."

Apparently, these groups formed on the basis of exclusion of the less capable by the more capable; again apparently, the sudden demand for task competence became an overriding consideration in the selection of group members, and, presumably, leadership function within the resulting groups.

In all three of these examples, there is a recurring theme, although to a lesser extent in the Hamblin study (9), that of survival in a challenging and hostile environment. It is instructive to examine the heavy task-accomplishment emphasis found in hierarchical organizations in the same light. One is tempted to believe that "Initiating Structure" activities are so frequently found because the survival of the organization is at stake in a competitive world, or at least survival of the management of the organization.

There is much more evidence that could be presented from the literature to support the general position taken in this symposium, but time does not permit. In quick summary, the general position has been that the emphasis on human relations in leadership training has been overdone. An overriding consideration, as Dr. Olmstead indicated, is the need, within organizations of the type with which we have been working, to give emphasis to a reality-centered type of leadership training in which leaders are sensitized to the demands of the environment and the actions that satisfy these demands.

Human relations is only a part of this, although admittedly, a needed part. Perhaps the reason there has not been more "reality-centered" leadership training than there has, is that it is considerably more difficult to design than mere sensitization to human relations. All three of the final papers in this symposium report part of an overall effort that led to the design of training, Dr. Hood for apprentice leaders, Dr. George for group members themselves, and myself for what might be considered to be the most junior of management trainees. In all these efforts, the training emphasis was on recognition of situational demands and emission of actions designed to satisfy these demands. All three efforts followed analysis of the client system to identify situational demands, and required massive allocations of resources from the initiation of the analysis to the end of the design of training. Perhaps of greatest significance, all three training outcomes seem to work.

Literature Cited

1. Fiedler, Fred E. A Contingency Model for the Prediction of Leadership Effectiveness, Technical Report 10, Group Effectiveness Research Laboratory, University of Illinois, Urbana, May 1963.

2. Lange, Carl J., Campbell, Vincent, Katter, Robert V., and Shanley, Fred J. A Study of Leadership in Army Infantry Platoons, HumRRO Research Report 1, November 1958.

3. Lange, Carl J., and Jacobs, T.O. Leadership in Army Infantry Platoons: Study II, HumRRO Research Report 5, July 1960.

4. Kaiser, Henry F. "The Varimax Criterion for Analytic Rotation in Factor Analysis," Psychometrika, vol. 23, 1958, pp. 187-200.

5. Kaiser, Henry F. "Computer Program for Varimax Rotation in Factor Analysis, Ed. Psych. Measurement, vol. 19, 1959, pp. 413-420.

6. Blake, R.R., Mouton, Jane S., Barnes, L.B., and Greiner, L.E. "Breakthrough in Organization Development," Harvard Business Rev., vol. 42, no. 6, 1964, pp. 133-155.

7. Fleichman, Edwin A., Harris, E.F., and Burtt, H.E. Leadership and Supervision in Industry, Monogr. No. 33, Ohio State University Bureau of Educational Research, Columbus, 1955.

8. Halpin, Andrew W. "The Leadership Behavior and Combat Performance of Airplane Commanders," J. Abnorm. Soc. Psychol., vol. 49, 1954, pp. 19-22.

9. Hamblin, Robert L., Miller, K., and Wiggins, J.A. Morale and the Competence of the Leader in Autocratic Structures, Technical Report No. 4, June 1960, Small Groups Research Center, Soc. Sci. Institute, Washington University, St. Louis, Mo.

10. Torrance, E. Paul. "What Happens to the Sociometric Structure of Small Groups in Emergencies and Extreme Conditions," Research Report AFPTRC-TN-57-143, Air Force Personnel and Training Res. Ctr., Lackland Air Force Base, Texas; also appeared in Group Psychotherapy, September 1957, pp. 212-220.

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